

ABSTRACT

A cardiac stimulation system and associated capture management method are provided in which a safety factor, used in setting pacing pulse output energy, is automatically adjusted in response to the detection of indicators of a likely increase in pacing threshold. The method includes monitoring for increased pacing threshold indicators, which may also be associated with a compromised ability to perform a pacing threshold search. Such indicators may include, but are not limited to, the presence of arrhythmias, arrhythmia episode duration, pacing mode switches, refractory sensed events, and/or lead impedance changes. In response to the detection of a selected indicator of increased pacing threshold, the safety factor is automatically increased. After an increased pacing threshold indicator has not be detected for an interval of time, or if a pacing threshold search yields a result, the safety factor may be restored to a programmed value.